

ABSTRACT OF THE DISCLOSURE

A method and apparatus are provided that allow processing engines to be synchronized to each other with high accuracy. In one embodiment, the invention includes obtaining a processor tick counter value from a first processing engine, comparing the obtained processor tick counter value to a processor tick counter value from a second processing engine and determining a timing offset for synchronizing the first processing engine and the second processing engine using the comparison. The invention may further include obtaining a processor tick counter value by sending a request message from the second processing engine to the first processing engine, and receiving a reply from the first processing engine at the second processing engine. The processor tick counter value at the second processing engine can be determined by recording the time at which the request message is sent and by recording the time at which the reply is received. The invention can further include obtaining a processor frequency from the first processing engine, obtaining a processor frequency from the second processing engine and correcting the timing offset for any difference between the first processing engine frequency and the second processing engine frequency